REMARKS/ARGUMENTS

Claims 1-9 and 11 are pending in this application, of which claims 1, 7, 8, and 9 are independent. By this Amendment, claims 1-9 are amended. Claim 10 is canceled without prejudice or disclaimer of its subject matter. Claim 11 is new.

The courtesies extended to Applicant's representatives by Examiner Giles at the interview held on March 31, 2009, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicant's record of the interview.

REJECTIONS UNDER 35 U.S.C. § 102

On pages 2-5, the Office Action rejects claims 1, 2, and 5-10 under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent Application Publication No. 2004/0057534 to Masenten et al (hereinafter "Masenten"). Applicant respectfully traverses this rejection.

As amended, independent claim 1 now recites, in part, the following subject matter: "wherein the filtering stage comprises a decimator **receiving an output signal from a time-control loop** having a loop quantizer and a loop filter" (emphasis added). This subject matter finds support in the published version of the specification, for example, in paragraph [0054]. Independent claims 7-9 contain similar recitations.

As described in the specification in paragraph [0055], this subject matter relates to a loop filter that may comprise an adder [Fig. 5: 201], an inverse z block

[202] and a gain block [203]. As the specification states, the loop filter averages sampling errors. See paragraph [0056]. The gain value ensures that the time-control loop is stable and converging. Consequently, due to the high time resolution available at the sigma delta modulator output, the time control loop allows digital tracking of an optimal sampling point without the need for additional complex hardware to interpolate between samples.

In contrast, Masenten fails to disclose, teach, or suggest "wherein the filtering stage further comprises a decimator receiving a feedback signal from a time-control loop having a loop quantizer and a loop filter," as recited in independent claim 1 and similarly recited in independent claims 7-9. As depicted in Fig. 3, Masenten provides a feed-forward system and provides no suggestion of any sort of feedback. In particular, Masenten uses neither a loop quantizer nor a loop filter in a feedback loop for a time-control function.

Therefore, Applicant respectfully submits that independent claims 1, 7, 8, and 9 are allowable over Masenten. Claims 2, 5, and 6 depend from claim 1 and are allowable at least by virtue of their dependency upon an allowable claim. Claim 10 is canceled. Accordingly, Applicant respectfully requests that the rejection of claims 1, 2, and 5-10 under 35 U.S.C. § 102(e) be withdrawn.

REJECTIONS UNDER 35 U.S.C. § 103

On page 6, the Office Action rejects claim 3 under 35 U.S.C. § 103(a) as allegedly unpatentable over Masenten in view of U.S. Patent No. 7,194,036 to

Melanson (hereinafter "Melanson"). On pages 6-7, the Office Action rejects claim 4 under 35 U.S.C. § 103(a) as allegedly unpatentable over Masenten in view of U.S. Patent No. 7,130,327 to Robinson et al (hereinafter "Robinson"). Applicant respectfully traverses these rejections.

Melanson and Robinson fail to remedy the deficiencies of Masenten described above. Moreover, claims 3 and 4 depend from claim 1. Thus, claims 3 and 4 are allowable at least by virtue of their dependency upon an allowable claim. Consequently, Applicant respectfully requests withdrawal of the rejection of claims 3 and 4 under 35 U.S.C. § 103(a).

NEWLY ADDED CLAIM 11

Applicant respectfully submits that newly added claim 11 is allowable at least by virtue of its dependency upon allowable claim 1. This subject matter finds support in the published version of the specification in, for example, paragraph [0055]. The loop filter [Fig. 5: 22] comprises an adder [201] that receives two inputs, a detected signal from the detector [21] and a feedback signal. The adder [210] then produces a sum and sends it to the inverse z block [202]. The output of the inverse z block [202] becomes the feedback signal for the adder [201] and is also sent into the gain block [203]. The output of the gain block [203] flows into the loop quantizer [23] and subsequently controls the decimator [52].
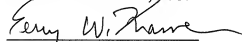
None of the references of record disclose, teach, or suggest the subject matter of claim 11. As none of cited prior art references provide a loop filter, those

references also do not disclose a loop filter comprising an adder, an inverse z block, and a gain block. Thus, Applicant respectfully submits that claim 11 is allowable.

CONCLUSION

In view of the remarks above, Applicant believes that each of the rejections and objections has been overcome and the application is in condition for allowance. In the event that the fees submitted prove to be insufficient in connection with the filing of this paper, please charge our Deposit Account Number 50-0578 and please credit any excess fees to such Deposit Account. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the attorney overseeing the application file, David Cordeiro of NXP Corporation, at (408) 474-9057.

Respectfully submitted,
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Date: April 8, 2009

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